Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
Introduction to Fractions		
	Visual Models of Fractions	
		Relate a fraction to its visual representation as a circle diagram (both directions), explaining the role of the numerator and denominator.
		Relate a fraction to its visual representation as a fraction bar (both directions), explaining the role of the numerator and denominator.
		Compare fractions with the same denominator using visual models.
		Real-World Application: Use fractions to represent a variety of real-world situations that can be modeled visually.
	Fractions on the Number Line	
		Identify the space between 0 and 1 as one whole and partition it into n pieces, each of with is 1/n wide.
		Relate a fraction to its position on the number line (both directions), seeing the fraction as being one number in which the denominator indicates the partition of 0 to 1 and the numerator indicates the size.
		Compare fractions with the same denominator using the number line.
		Real-World Application: Use number lines, including customary rulers, that can be used to compare fractions to each other to solve real-world problems.
	Fractions as Parts of a Total	
		Describe sets as wholes and fractions as representations of parts of that set.
		Compare two fractions with the same denominator by comparing different parts of the same set.
		Real-World Application: Use fractions to represent real-world parts of a set and compare different parts of the same set.
	Equivalent Fractions	
		Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b).
		Generate equivalent fractions, including fractions in which either the numerator or denominator is already given.
		Real-World Application: Apply the concept of equivalent fractions to real-world problems.

Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
	Improper Fractions and Mixed Numbers	
		Write mixed numbers and improper fractions based on visual models.
		Find equivalence between mixed numbers and improper fractions.
		Real-World Application: Solve word problems involving mixed numbers.
	Benchmark Fractions	
		Use concrete models to represent benchmark fractions.
		Compare a fraction to a benchmark, including finding equivalent fractions (e.g., compare 5/14 to 1/2, which is 7/14).
		Choose the benchmark nearest a given fraction.
		Real-World Application: Compare a fraction to a benchmark to solve a real-world problem.
	Comparing Fractions via Benchmark Fractions	
		Use benchmark fractions to compare fractions.
		Use benchmarks to order 3 or more fractions.
		Real-World Application: Compare and order real-world measurements using a benchmark.
	Using Equivalent Fractions to Compare Fractions	
		Use visual representations, including number line and fraction bars, to compare fractions with denominators that are different but compatible (e.g., compare 5/14 to 1/2 , which is 7/14.).
		Rewrite fractions to have a common denominator.
		Compare and order two or three fractions and/or mixed numbers with different denominators.
		Real World Application: Compare fractions that represent a variety of real-world situations by finding an equivalent fraction.
	Unit Test	
Operations with Fractions		

Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
	Adding and Subtracting Fractions	
		Model and compute sums and differences of fractions when the denominator is the same.
		Find an equivalent form of a computed sum or difference, including lowest terms.
		Real-World Application: Solve real-world problems using addition and subtraction of fractions.
	Using Equivalent Fractions to Add and Subtract Fractions	
		Use visual representations to add and subtract fractions with denominators that are different but compatible (e.g., 5/6 – 1/2, which can be shown as 2/6 visually; the difference shows that 5/6 is 2/6 greater than 1/2.).
		Add and subtract two fractions with different denominators.
		Real-World Application: Find common denominators to add or subtract different parts of inches and feet.
	Multiplying a Fraction by a Whole Number	
		Interpret n × (1/b) as the sum of 1/b + 1/b + … + 1/b (n terms); extend to n × a/b through repeated addition.
		Interpret 1/b × n as 1/bth of n by comparing to 1 × n, 2 × n, etc.
		Interpret a/b × n in terms of repeated addition, and compute products of the form n × a/b using that algorithm.
		Real-World Application: Solve real-world problems involving a fraction of a total using multiplication (both unit fractions and otherwise).
	Multiplying a Fraction by a Fraction	
		Explain the algorithm for multiplying a/b × c/d through visual representations.
		Explain a/b × c/d as a fractional part of a fraction.
		Multiply fractions and mixed numbers.

Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Real-World Application: Solve a variety of problems involving a fractional part of a fraction.
	Unit Test	
Introduction to Decimals		
	Place Value and Decimals	
		Model decimals to hundredths.
		State the meaning of a given digit to thousandths (e.g., The 6 in 3.067 represents 6 hundredths).
		Convert decimals in expanded, standard, or word form to thousandths.
	Decimals on the Number Line and Rounding Decimals	
		Plot and name decimals on the number line.
		Round decimals using both the number line and pure place value strategies.
		Real-World Application: Round money to estimate.
	Comparing Decimals	
		Create and justify the equivalence of multiple representations of decimal values.
		Use various place value strategies to compare decimal values.
		Real-World Application: Compare decimals using real-world measurements.
	Unit Test	
Operations with Decimals		
	Adding Decimals	
		Represent sums using manipulatives (base-10 blocks, money).
		Add decimals using a variety of strategies, including counting up and the standard algorithm.
		Identify and correct common errors of addition with decimals.

Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Real-World Application: Use decimals to find real-world sums involving money.
	Subtracting Decimals	
		Represent differences using manipulatives (base 10 blocks, money).
		Subtract by place value using a variety of strategies including counting up and the standard algorithm.
		Real-World Application: Solve real-world problems involving subtraction of decimals.
	Multiplying and Dividing Decimals by a Power of 10	
		Multiply decimals by powers of 10.
		Divide by powers of 10.
		Real-World Application: Solve real-world problems involving multiplication and division by 10, 100, 1000, etc., and describe the relative sizes of the numbers.
	Multiplying a Whole Number by a Decimal Less than 1	
		Interpret n × d both as the sum of n copies of the decimal d and a portion of n to justify multiplying according to place value, regrouping as needed.
		Multiply whole numbers by decimals less than one.
		Use rounding to estimate a product before computing as a means of developing a sense of the size of the product.
		Real-World Application: Solve real-world problems involving a decimal part of a whole number using multiplication.
	Multiplying Decimals	
		Use rounding to estimate a product before computing as a means of developing a sense of the size of the product, including the position of the decimal point in the product.
		Multiply decimals to the hundredths place.
		Real-World Application: Solve real-world problems involving multiplication of decimals, especially those involving a decimal part of a decimal.
	Unit Test	

Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
Relationships Between Fractions and Decimals		
	Equivalent Fractions and Decimals	
		Use equivalent fractions to convert between “friendly” fractions and decimals.
		Interpret a/b as the quotient of a and b in order to find a decimal equivalent for a/b by dividing.
		Find the fraction form of a decimal, including common repeating decimals.
		Real-World Application: Solve real-world problems by converting between fractions and decimals.
	Ordering, Adding, and Subtracting Fractions and Decimals	
		Use rounding, benchmarks, and common denominators to compare decimals to fractions and to estimate a sum or difference before or after computing.
		Order a list of fractions and decimals using various strategies, including a number line, common denominators, rounding, and benchmarks.
		Real-World Application: Solve real-world problems that involve a mixture of decimals and fractions.
	Word Problems: Multiplying by a Fraction and a Decimal	
		Estimate a product before computing as a means of developing a sense of the size of the product, or after to check for reasonableness.
		Multiply fractions and decimals.
		Real-World Application: Solve real-world problems involving multiplication of fractions and decimals.
	Using a Calculator with Fractions and Decimals	
		Use estimation and number sense strategies for checking the output of a calculator computation involving fractions and/or decimals (E.g., when you multiply 923 by 0.123, what should you expect the calculator to give you, approximately?).
		Identify reasons for using or not using a calculator on a given problem involving fractions and/or decimals.

Basic Math II		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Determine an error in a calculator entry dealing with order of operations involving fractions and/or decimals.
	Multistep Word Problems with Fractions and Decimals	
		Identify key information for solving two-step word problems, including question, problem type, and order of operations needed.
		Use estimation to determine if a solution is reasonable.
		Real-World Application: Solve real-world problems with two operations involving fractions and/or decimals.
	Unit Test	
Cumulative Exam		
	Cumulative Exam Review	
	Cumulative Exam	